

MA3X152A (MA152A), MA3X152K (MA152K)

Silicon epitaxial planar type

For high-speed switching circuits

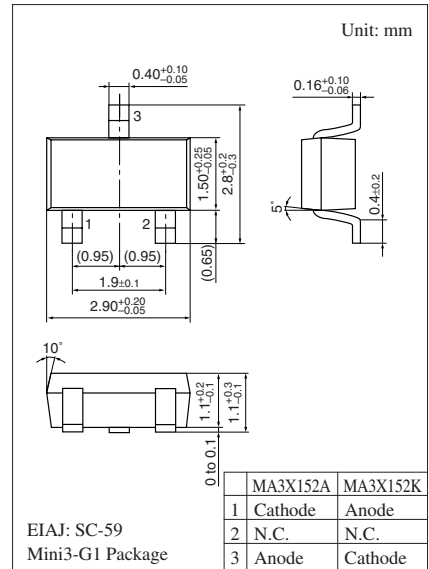
■ Features

- Short reverse recovery time t_{rr}
- Small terminal capacitance C_t

■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse voltage	V_R	80	V
Maximum peak reverse voltage	V_{RM}	80	V
Forward current	I_F	100	mA
Peak forward current	I_{FM}	225	mA
Non-repetitive peak forward surge current *	I_{FSM}	500	mA
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^\circ\text{C}$

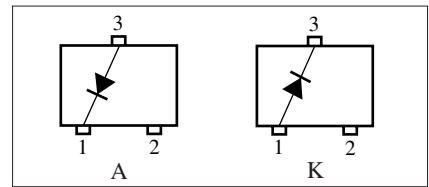
Note) *: $t = 1\text{ s}$



Marking Symbol

- MA3X152A: MB
- MA3X152K: MI

Internal Connection



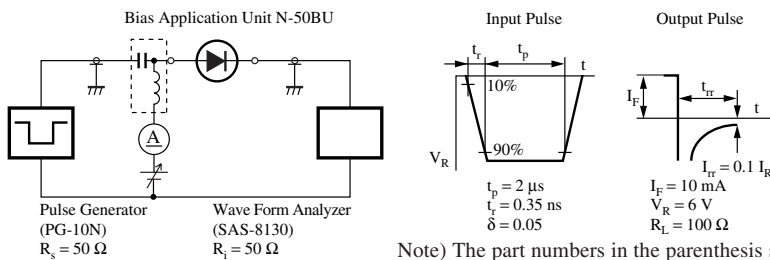
■ Electrical Characteristics $T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	MA3X152A	$I_F = 100\text{ mA}$			1.2	V
	MA3X152K				1.2	
Reverse voltage	V_R	$I_R = 100\ \mu\text{A}$	80			V
Reverse current	I_R	$V_R = 75\text{ V}$			100	nA
Terminal capacitance	C_t	$V_R = 0\text{ V}, f = 1\text{ MHz}$			2	pF
Reverse recovery time *	t_{rr}	$I_F = 10\text{ mA}, V_R = 6\text{ V}$ $I_{rr} = 0.1 I_R, R_L = 100\ \Omega$			3	ns

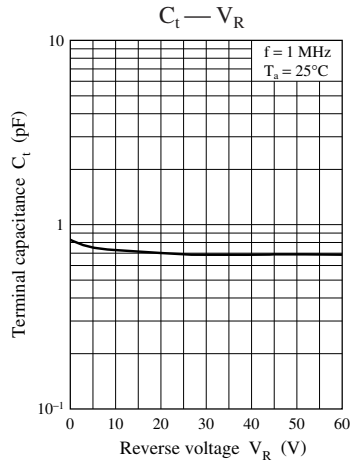
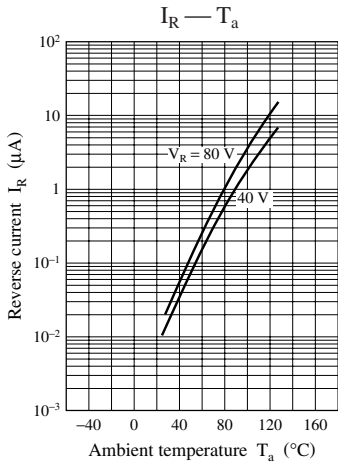
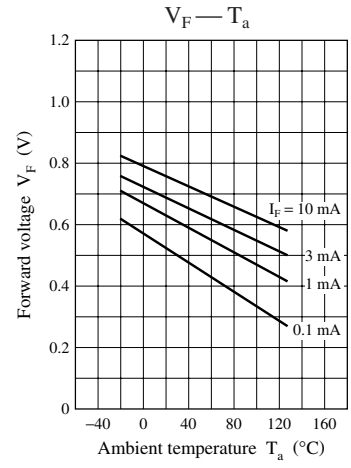
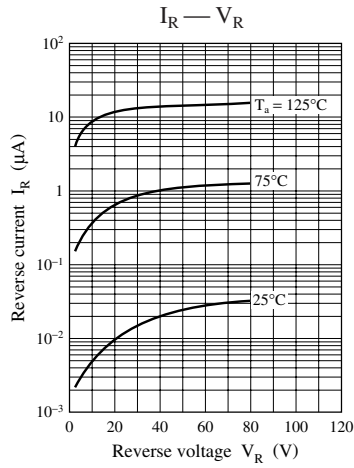
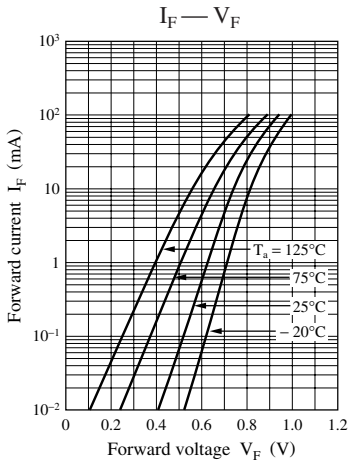
Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7031 measuring method for diodes.

2. Absolute frequency of input and output is 100 MHz.

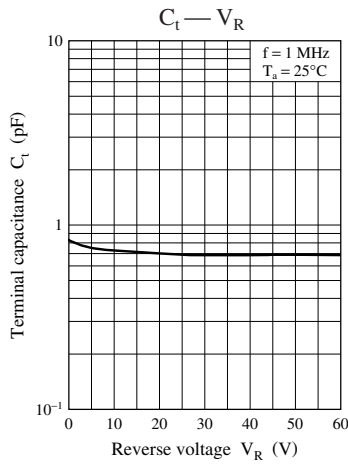
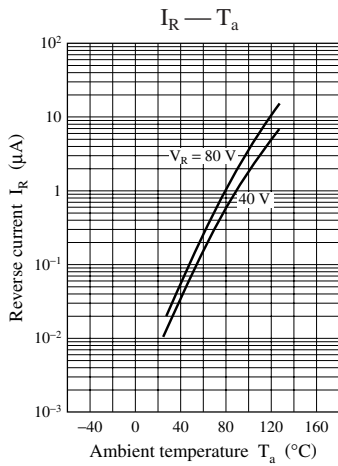
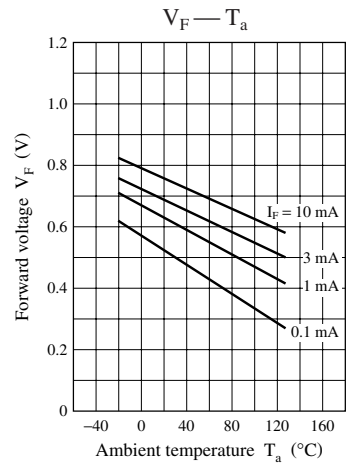
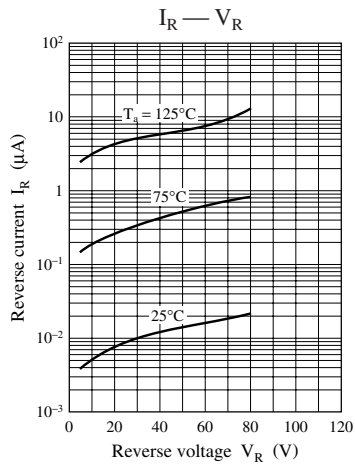
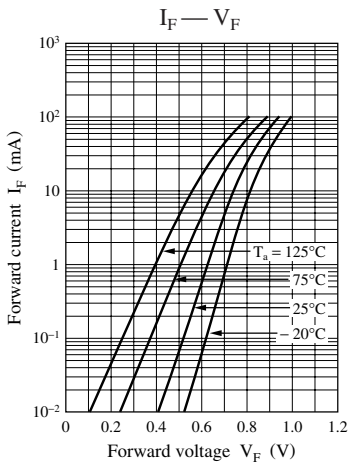
3. *: t_{rr} measurement circuit



Characteristics chart of MA3X152A



Characteristics chart of MA3X152K



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